

COASTAL CONSERVANCY

Staff Recommendation
May 24, 2007

**INVASIVE SPARTINA PROJECT (ISP)
PHASE II - CONTROL PROGRAM, PETALUMA RIVER WATERSHED**

File No. 99-54
Project Manager: Maxene Spellman

RECOMMENDED ACTION: Amendment of the Conservancy's March 8, 2007 authorization to disburse Conservancy funds for the Invasive *Spartina* Project, by authorizing a redirection of up to \$50,000 of those funds from management to a grant to the Friends of the Petaluma River for control and treatment activities in various locations on the Petaluma River.

LOCATION: The Petaluma River in southern Sonoma County and the City of Petaluma.

PROGRAM CATEGORY: San Francisco Bay Area Conservancy

EXHIBITS

- Exhibit 1: [Map of Petaluma Treatment Sites](#)
 - Exhibit 2: [March 8, 2007 Staff Recommendation](#)
 - Exhibit 3: [Invasive *Spartina* Control Plan for Petaluma River](#)
 - Exhibit 4: [Environmental Documentation: Petaluma River Invasive *Spartina* Mitigation Matrix](#)
 - Exhibit 5: [Support Letter from City of Petaluma](#)
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RESOLUTION AND FINDINGS:

Staff recommends that the State Coastal Conservancy adopt the following resolution pursuant to Chapter 4.5 of Division 21 of the Public Resources code:

"The State Coastal Conservancy hereby amends its March 8, 2007 authorization to disburse Conservancy funds for the Invasive *Spartina* Project (ISP), by authorizing a redirection of up to fifty thousand dollars (\$50,000) of those funds from management to a grant to Friends of the Petaluma River to treat and remove invasive *Spartina* in various locations on the Petaluma River. This authorization is subject to the same conditions imposed by paragraphs 1(b) and 1(c) of the Conservancy's March 8, 2007 resolution."

Staff further recommends that the Conservancy adopt the following findings:

“Based on the accompanying staff report and attached exhibits, the State Coastal Conservancy hereby finds that:

1. The redirection of previously authorized funds from ISP management activities to an ISP treatment and control grant is consistent with the findings and discussion accompanying the Conservancy authorization of March 8, 2007, as shown in the staff recommendation attached as Exhibit 2 to this staff recommendation.
2. The environmental effects associated with the proposed Petaluma River control and treatment projects and the mitigation measures to reduce or avoid those effects were fully identified and considered in the program FEIS/R certified by the Conservancy on September 25, 2003.
3. Friends of Petaluma River is a private nonprofit organization existing under Section 501(c)(3) of the U.S. Internal Revenue Code, and whose purposes are consistent with Division 21 of the California Public Resources Code.”

PROJECT SUMMARY:

On March 8, 2007, the Conservancy authorized the disbursement of funding for ongoing management of the Invasive *Spartina* Project (“ISP”) Control Program through spring of 2008, as well as authorizing funding to amend existing grants for treatment activities through 2007. This request is to re-direct a portion of funding approved for management to a grant to Friends of the Petaluma River (“Friends”) for treatment activities for a new infestation of invasive *Spartina* and hybrids recently found in the Petaluma River watershed. (See Exhibit 1, Map of Petaluma Treatment Sites.) Staff has determined that the funding previously authorized for one year of ongoing ISP management can be reduced by \$50,000 without adverse affect on the ISP. This would free up the amount proposed for redirection to the Friends grant and needed to accomplish the two years of treatment of the invasive *Spartina* infestation in the Petaluma River watershed. In addition to control and treatment activities, the Friends will also investigate the means by which invasive *Spartina* may have been transported from the San Francisco Estuary to the new locations on the Petaluma River, which are centered around a barge operation in the City of Petaluma.

It is essential to eradicate all the invasive *Spartina* hybrids in the Petaluma River watershed to prevent degradation of the Petaluma River sloughs, creeks and marshlands currently providing a regionally significant ecological refuge for wildlife. The sparse populations of the *Spartina* hybrids in the Petaluma River occur within this large, intact marsh system in proximity to the native *Spartina foliosa* and other marsh plant species. If left untreated, these stands of *Spartina* hybrids can re-hybridize with the native, quickly spreading the invasion to cover mudflats and clog rivers and sloughs.

The invading *Spartina* hybrids are currently spread in two of four sub-areas as described in Exhibit 3, the site specific Invasive *Spartina* Control Plan for the Petaluma River. With a grant from the Conservancy, the Friends proposes to undertake eradication activities in coordination with ISP before these new infestations become established. Boats and helicopter will be used to treat *Spartina* with herbicide in hard-to-access areas of the marsh where ground-based treatment is impossible. The remaining scattered *Spartina* patches that are accessible on foot will be treated

using backpack sprayers, with the applicator walking the marsh to apply the herbicide. Digging of small clusters may be undertaken at appropriate sites along the riverside. Covering strategies may also be employed where the structure of the infested area will enable long-term placement of fabric without the threat of wave energy displacing it. After treatment, the ISP monitoring program and the Friends will monitor these areas for treatment efficacy and additional *Spartina* locations.

This proposed project will employ treatment methods that are already being undertaken bay-wide for the ISP Control Program. The use of herbicide as one of many possible treatment methods was initially reviewed and approved by the Conservancy on September 25, 2003 (see staff recommendation attached to Exhibit 2), in connection with the initial ISP Control Program authorization and Conservancy certification of the Final Programmatic Environmental Impact Statement/Environmental Impact Report, San Francisco Estuary Invasive *Spartina* Project: *Spartina* Control Program (“FEIS/EIR”). By Addendum to the FEIS/EIR, reviewed by the Conservancy at its June 16, 2005 meeting (see staff recommendation attached to Exhibit 2), the Conservancy approved a revision to the ISP Control Program, allowing the use of a newly registered aquatic herbicide, imazapyr (and associated surfactants and colorants), which is both more effective and has even less potential effect on the environment than the previously approved herbicide, glyphosate.

As discussed in detail in the “COMPLIANCE WITH CEQA” section, below, there are no potentially significant environmental impacts associated with the treatment of the newly infested sites on the Petaluma River that were not considered in the certified FEIS/EIR. All mitigation measures identified in the FEIS/EIR, which will reduce potentially significant impacts to less than significant, will be carried out before, during and after treatment. (See Exhibit 3: the site-specific “Invasive *Spartina* Control Plan for Petaluma River”, and Exhibit 4: “Environmental Documentation: Petaluma River Invasive Mitigation Matrix”, outlining site conditions and activities, potential impacts and required mitigation), and Exhibit 5, Petaluma River Invasive *Spartina* Mitigation Matrix).

The Friends nonprofit organization is well suited to undertake responsibility for coordinating with ISP for the treatment and eradication activities, and for investigating possible sources of transmission of the invasive *Spartina* to this location. Before Friends was established as a nonprofit, its members ran the Petaluma Riverkeeper which evolved into the Petaluma Wetlands Alliance. The Alliance promoted the Conservancy-funded Petaluma Marsh Acquisition, Enhancement and Access project, which is located in the area of, and now threatened by, invasive *Spartina* hybrids. In 2006, the Alliance morphed into the Friends of the Petaluma River, and over the past year has continued to promote stewardship, and provide access opportunities, educational materials, and conservation programs for the preservation and public enjoyment of the Petaluma River. The Friends also alerted ISP of the new infestation and have assisted in monitoring it.

Site Description: The infestation is limited to less than an acre, but is scattered among a complex of shoreline locations covering approximately 3,500 acres (Exhibit 1). The small stands of invasive *Spartina* are scattered upstream and downstream from a central core located on both shores of the Petaluma River in the City of Petaluma adjacent to a dredging and barge dock facility. (There is the possibility that additional small, isolated stands may be located in the same

general location, in which case the treatment grant would extend to those areas, as well). Land uses that are adjacent to the infestation sites also include industrial and commercial development, docks and marinas, the California State Highway 101 overpass, and the popular Shollenberger Park and wetland trail.

On the south side of the Shollenberger Park and trail is the City's new 336-acre Petaluma Marsh Acquisition, Enhancement and Access project funded in part by the Conservancy. (See Exhibit 1: Map of the Petaluma River treatment sites, "Gray's field breach" and the adjacent marsh to its south.) While no hybrid infestations are currently found at the new wetland, nearby stands could potentially spread to this site before treatment can begin. Since this Petaluma wetland enhancement site is lightly vegetated, it is highly vulnerable to invasion by non-native *Spartina* due to a lack of biotic resistance.

The Petaluma Marsh proper, the largest intact historic marsh system in the San Francisco Estuary, extends south from the newly enhanced wetland. *Spartina* hybrids, found in discrete round clumps, are scattered in only a few locations in the Petaluma Marsh proper. No invasive *Spartina* stands are found south of the Lakeville Marina (See Exhibit 1, Map of the Petaluma River Treatment Sites).

Since many of the marshes along the Petaluma River provide habitat for the endangered California clapper rail, ground and water based treatment will not begin until September 1, following the end of the rail's breeding season. Other mitigation measures to protect the rail and the many other sensitive marsh species for which the sites provide habitat, will also be implemented (See Exhibit 4, Petaluma River Invasive *Spartina* Mitigation Matrix).

Project History: As explained in detail in previous staff recommendations (Exhibit 2), control of invasive *Spartina* and its hybrids within the San Francisco Bay Estuary is critical to the long-term health of the Estuary and to the species which inhabit and rely upon the salt marshes and tidal flats along its perimeter. Invasive *Spartina* spreads at a greater than exponential rate, and every marsh restoration project implemented within the south and central San Francisco Bay Estuary in the past 15 years has been invaded by non-native invasive *Spartina*. Since 1999, the Conservancy has managed the regionally coordinated effort to address the problem. On March 8, 2007, the Conservancy authorized expenditure of funds for treatment and management through spring of 2008. As described in that staff recommendation, the heart of the infestation in the Estuary is now under control and current and future efforts will focus on eradication. The proposed project in the Petaluma River Watershed will likewise focus on eradication targeting all infested sites.

The project was brought to the attention of ISP and the Conservancy by the Friends nonprofit organization. In the winter of 2007, the Friends alerted ISP of the potential infestations along the river, and helped identify small, scattered populations of invasive *Spartina* along the shores of the Petaluma River. Based on mapping, monitoring and genetic testing, ISP determined that the *Spartina* hybrids identified are still very limited in their distribution, covering, in total, less than 1 acre.

In October of 2002, the Conservancy authorized funding for the Petaluma Marsh Acquisition, Enhancement and Access project as a grant to the City of Petaluma. The City acquired three properties, recently concluded wetland enhancement activities as part of a larger project to create

polishing wetlands, and will soon complete public access improvements on the 336-acre enhancement site. It is essential to protect the new wetland by eradicating all populations of invasive *Spartina* in the vicinity of this site as is proposed by this project.

PROJECT FINANCING:

Coastal Conservancy Prop 50 previously authorized (3/8/07)	\$50,000
Friends of Petaluma River in-kind services	<u>1,150</u>
Total Project Cost	\$51,150

Conservancy funding is expected to come from the fiscal year 2005/06 appropriation to the Conservancy from the Water Security, Clean Drinking Water, Coastal Beach Protection Fund of 2002 (Proposition 50) as described in the Conservancy's authorization for this proposed funding for the 2007 Invasive *Spartina* Control Program (See Exhibit 3, March 8, 2007 Staff Recommendation).

CONSISTENCY WITH CONSERVANCY'S ENABLING LEGISLATION:

As described in previous staff recommendations (Exhibit 2) and associated Conservancy resolutions, the ISP and implementation of the Control Program serve to carry out the objectives for the San Francisco Bay Area Conservancy Program mandated by Chapter 4.5 of the Conservancy's enabling legislation (Public Resources Code Section 31162(a)), since both the Control Program will serve to protect and restore tidal marshes, which are natural habitats of regional importance. Operation and monitoring and mapping activities for the ISP incorporate CEQA/NEPA compliance and permitting required for implementation of the Control Program.

**CONSISTENCY WITH CONSERVANCY'S
STRATEGIC PLAN GOAL(S) & OBJECTIVE(S):**

The ISP Control Program, with the addition of the Petaluma River treatment, remains consistent with the Conservancy's Strategic Plan, as described in prior staff recommendations (Exhibit 2).

**CONSISTENCY WITH CONSERVANCY'S
PROJECT SELECTION CRITERIA & GUIDELINES:**

As discussed in previous staff recommendations (Exhibit 2), the ISP Control Program and the proposed addition of the Petaluma River treatment grant, remain consistent with the Conservancy's Project Selection Criteria and Guidelines adopted January 24, 2001.

CONSISTENCY WITH SAN FRANCISCO BAY PLAN:

The ISP Control Program, revised as proposed, remains consistent with the San Francisco Bay Plan, as detailed in previous staff recommendations (Exhibit 2).

COMPLIANCE WITH CEQA:

This authorization involves a new site-specific project that falls under the “Final Programmatic Environmental Impact Statement/Environmental Impact Report, San Francisco Estuary Invasive *Spartina* Project: *Spartina* Control Program” (FEIS/R) prepared for the ISP Control Project pursuant to the California Environmental Quality Act (CEQA). The FEIS/R was adopted by the Conservancy through its September 25, 2003 resolution certifying the EIR. The FEIS/R is maintained and available for review at the offices of the Conservancy.

The FEIS/R is a *programmatic* Environmental Impact Report (Section 15168 of the CEQA Guidelines, 14 Cal. Code of Regulations, Sections 15000 *et seq.*, hereafter “Guidelines”) in that it analyzes the potential effects of implementing treatment methods for a regional program rather than the impacts of a single individual project. This program-level EIS/R identifies mitigation measures that will be applied to reduce or eliminate impacts at specific treatment locations under a wide range of potential conditions and a variety of treatment modalities. The Conservancy may use the FEIS/R as a basis for “tiered” CEQA review and approval of individual treatment projects under the Control Program, including the new treatment proposed by this staff recommendation.

A subsequent activity that follows under a program EIR that has been assessed pursuant to CEQA must be examined in the light of the program EIR to determine whether an additional environmental document must be prepared. If the agency proposing the later activity finds that its effects and required mitigation to reduce those effects were already identified and considered under the program EIR, the activity can be approved with no further environmental documentation (CEQA Guidelines, Section 151168 (c)). The Guidelines suggest the use of a written checklist or similar device to document the evaluation of the activity to determine whether the environmental effects of the operation were covered in the program EIR.

The new Petaluma River treatment project has a prepared site-specific plan, describing the site and identifying the precise treatment activities proposed (Exhibit 3). In addition, it has been assessed by use of a checklist matrix to determine whether the effects of those activities and the mitigation required have been considered by the FEIS/R (Exhibit 4).

As this documentation demonstrates, the program FEIS/R did fully consider all of the potential environmental effects associated with the project and there are no new mitigation measures beyond those imposed by the FEIS/EIR that are required for the new treatment activities on the Petaluma River. Conservancy staff thus recommends that the Conservancy adopt a finding to that effect.